FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Diamond Shamrock Refining Company, L.P.

AUTHORIZING THE OPERATION OF

Valero McKee Refinery Hydrogen Unit Petroleum Refining LOCATED AT

Moore County, Texas

Latitude 35° 57' 6" Longitude 101° 52' 24"

Regulated Entity Number: RN100210517

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

| Permit No: _ | 03427 | Issuance Date: _ | February 14, 2012 |
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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart DDDDD as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1130 which incorporates the 40 CFR Part 63 Subpart by reference.
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
 - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

- (3) Records of all observations shall be maintained.
- (4)Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation

- on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
 - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
 - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
 - (iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
 - (iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. For petroleum refinery facilities subject to 40 CFR Part 60, Subpart QQQ, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 60.692-1(a) (c) (relating to Standards: General)
 - B. Title 40 CFR § 60.692-2(a) (c), (e) (relating to Standards: Individual Drain Systems)
 - C. Title 40 CFR § 60.692-6(a) (b) (relating to Standards: Delay of Repair)
 - D. Title 40 CFR § 60.692-7(a) (b) (relating to Standards: Delay of Compliance)
 - E. Title 40 CFR § 60.693-1(a) (d), (e)(1) (3) (relating to Alternative Standards for Individual Drain Systems)
 - F. Title 40 CFR § 60.697(a), (b)(1) (3) (relating to Recordkeeping Requirements), as applicable to Individual Drain Systems
 - G. Title 40 CFR § 60.697(f)(1) (2), (g) (relating to Recordkeeping Requirements), as applicable to Individual Drain Systems
 - H. Title 40 CFR § 60.697(h) (relating to Recordkeeping Requirements), as applicable to excluded Stormwater Sewer Systems
 - I. Title 40 CFR § 60.697(i) (relating to Recordkeeping Requirements), as applicable to excluded Ancillary Equipment

- J. Title 40 CFR § 60.697(j) (relating to Recordkeeping Requirements), as applicable to excluded Non-contact Cooling Water Systems
- K. Title 40 CFR § 60.698(a), and (b)(1) (relating to Reporting Requirements), as applicable to Individual Drain Systems
- L. Title 40 CFR § 60.698(c) (relating to Reporting Requirements), for water seal breaches in Drain Systems
- M. Title 40 CFR § 60.698(e) (relating to Reporting Requirements), as applicable to Individual Drain Systems
- 6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)
- 7. For facilities where total annual benzene quantity from waste is greater than or equal to 10 megagrams per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 61.342(c)(1)(i) (iii) (relating to Standards: General)
 - B. Title 40 CFR § 61.342(e)(1) (relating to Standards: General)
 - C. Title 40 CFR § 61.342(e)(2)(i) (ii) (relating to Standards: General)
 - D. Title 40 CFR § 61.342(g) (relating to Standards: General)

- E. Title 40 CFR § 61.350(a) and (b) (relating to Standards: Delay of Repair)
- F. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(6), (b), and (c)(1) (3) (relating to Test Methods, Procedures, and Compliance Provisions)
- G. Title 40 CFR § 61.355(k)(1) (6), and (7)(i) (iv) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
- H. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
- I. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
- J. Title 40 CFR § 61.356(b)(4) (relating to Recordkeeping Requirements)
- K. Title 40 CFR § 61.356(b)(5) (relating to Recordkeeping Requirements)
- L. Title 40 CFR § 61.357(a), (d)(1), (d)(2) (d)(6) and (d)(8) (relating to Reporting Requirements)
- M. Title 40 CFR § 61.357(d)(5) (relating to Reporting Requirements)
- 8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 9. For sources subject to emission standards in 40 CFR Part 63, Subpart CC, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.340 incorporated by reference):
 - A. Title 40 CFR § 63.640(l)(3) (4) (relating to Applicability and Designation of Affected Source), for units and equipment added to an existing source
 - B. Title 40 CFR § 63.640(m)(1) (2) (relating to Applicability and Designation of Affected Source), for units and emission points changing from Group 2 to Group 1 status
 - C. Title 40 CFR § 63.642(c) (relating to General Standards), for applicability of the General Provisions of Subpart A
 - D. Title 40 CFR § 63.642(e) (relating to General Standards), for recordkeeping
 - E. Title 40 CFR § 63.642(f) (relating to General Standards), for reporting
 - F. Group 1 process wastewater streams not managed in a wastewater management unit subject to 40 CFR Part 63, Subpart G shall comply with 40 CFR Part 61, Subpart FF as specified in 40 CFR §§ 63.647(a) (c) and 63.655(a)

New Source Review Authorization Requirements

- 10. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 11. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 12. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

- 13. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 14. Use of Discrete Emission Credits to comply with the applicable requirements:

- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Risk Management Plan

15. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

- 16. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance

with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

- B. Any on site servicing, maintenance, and repair of fleet vehicle air conditioning using ozone-depleting refrigerants shall be conducted in accordance with 40 CFR Part 82, Subpart B. Permit holders shall ensure that repairs or refrigerant removal are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart B.
- C. The permit holder shall comply with 40 CFR Part 82, Subpart A for controlling the production, transformation, destruction, export or import of a controlled (ozone-depleting) substance or product as specified in 40 CFR § 82.1 § 82.13 and the applicable Part 82 Appendices.
- D. The permit holder shall comply with the following 40 CFR Part 82, Subpart E requirements for labeling products using ozone-depleting substances:
 - (i) Title 40 CFR § 82.100 (relating to Purpose)
 - (ii) Title 40 CFR § 82.102(a)(1) (3), (b), (c) (relating to Applicability);
 - (iii) Title 40 CFR § 82.104 (relating to Definitions)
 - (iv) Title 40 CFR § 82.106 112 (relating to Warning Statements and Labels)
 - (v) Title 40 CFR § 82.114 (relating to Labeling Containers of Controlled [ozone depleting] Substances)
 - (vi) Title 40 CFR § 82.116 (relating to Incorporation of Products Manufactured with Controlled [ozone-depleting] Substances)
 - (vii) Title 40 CFR § 82.120 (relating to Petitions)
 - (viii) Title 40 CFR § 82.122 (relating Certification, Recordkeeping, and Notice requirements)
 - (ix) Title 40 CFR § 82.124 (relating to Prohibitions)
- E. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 82.166 and the applicable Part 82 Appendices.

- F. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 § 82.270 and the applicable Part 82 Appendices.
- G. The permit holder shall comply with 40 CFR Part 82, Subpart A, § 82.13 related to recordkeeping and reporting requirements for the production and consumption of ozone depleting substances.

Permit Location

17. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

18. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Permit Shield

New Source Review Authorization References

| Unit Summary | 15 |
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| Applicable Requirements Summary | |

Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|------------------|----------------------------------|-------------------------|
| H-89 | FCCU CAT REGEN/ FUEL GAS COMBUSTION/ CLAUS SRU | N/A | 60Ja-1 | 40 CFR Part 60, Subpart Ja | No changing attributes. |
| H-89 | PROCESS HEATERS/ FURNACES | N/A | 63DDDDD-01 | 40 CFR Part 63, Subpart DDDDD | No changing attributes. |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|--|---|---|---|--|
| Н-89 | EU | 60Ja-1 | H2S | 40 CFR Part 60, Subpart Ja | \$ 60.102a(g)(1)(ii) \$ 60.100a(a) \$ 60.100a(b) \$ 60.102a(a) \$ 60.102a(g) \$ 60.102a(g) \$ 60.102a(c) \$ 60.103a(c) [G]\$ 60.103a(d) [G]\$ 60.103a(e) [G]\$ 60.107a(a)(3) \$ 60.107a(b) [G]\$ 60.109a | The owner or operator shall not burn in any fuel gas combustion device any fuel gas that contains H2S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H2S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis. | \$ 60.104a(a) \$ 60.104a(c) [G]\$ 60.104a(j) \$ 60.107a(a) \$ 60.107a(a)(2)(i) \$ 60.107a(a)(2)(ii) \$ 60.107a(a)(2)(iii) \$ 60.107a(a)(2)(iii) \$ 60.107a(a)(2)(iv) [G]\$ 60.107a(b)(3) \$ 60.107a(i) \$ 60.107a(i)(1)(iii) \$ 60.107a(i)(1)(iiii) | \$ 60.107a(a)(2) [G]\$ 60.107a(b)(3) \$ 60.108a(a) \$ 60.108a(c)(5) \$ 60.108a(c)(6)(i) \$ 60.108a(c)(6)(ii) \$ 60.108a(c)(6)(iii) \$ 60.108a(c)(6)(iii) \$ 60.108a(c)(6)(vii) \$ 60.108a(c)(6)(viii) \$ 60.108a(c)(6)(viii) \$ 60.108a(c)(6)(ix) \$ 60.108a(c)(6)(ix) \$ 60.108a(c)(6)(x) [G]\$ 60.108a(d) | [G]§ 60.107a(b)(1) § 60.107a(b)(2) § 60.108a(a) § 60.108a(b) [G]§ 60.108a(d) |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|-----------|--|---|--|--|---|---|
| H-89 | EU | 60Ja-1 | NOx | 40 CFR Part 60, Subpart Ja | [G]§ 60.102a(g)(2)(i) § 60.100a(a) § 60.100a(b) § 60.102a(a) § 60.102a(g) § 60.102a(g) [G]§ 60.109a | For each induced draft process heater with a rated capacity of greater than 40 MMBtu/hr on a higher heating value basis, the owner or operator shall not discharge to the atmosphere any emissions of NOx in excess of 40 ppmv (dry basis, corrected to 0% excess air) determined daily on a 30-day rolling average basis; or 0.040 lb/MMBtu higher heating value basis determined daily on a 30-day rolling average basis if fuel gas composition is monitored as specified in §60.107a(d). | \$ 60.104a(a) \$ 60.104a(c) \$ 60.104a(i) \$ 60.104a(i)(2) \$ 60.104a(i)(2) \$ 60.104a(i)(3) \$ 60.104a(i)(5) \$ 60.104a(i)(7) \$ 60.107a(c)(2) \$ 60.107a(c)(1) \$ 60.107a(c)(2) \$ 60.107a(c)(3) \$ 60.107a(c)(4) \$ 60.107a(c)(5) \$ 60.107a(d)(1) \$ 60.107a(d)(2) \$ 60.107a(d)(2) \$ 60.107a(d)(3) [G]\$ 60.107a(d)(3) [G]\$ 60.107a(d)(5) [G]\$ 60.107a(d)(5) [G]\$ 60.107a(d)(6) [G]\$ 60.107a(d)(7) \$ 60.107a(i)(3) \$ 60.107a(i)(3) \$ 60.107a(i)(3) | § 60.107a(c) § 60.107a(d) § 60.108a(a) [G]§ 60.108a(d) | § 60.108a(a) § 60.108a(b) [G]§ 60.108a(d) |

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|------------------------------------|----------------------------------|---------------------|----------------|--|---|---|---|--|---|
| Н-89 | EU | 63DDDDD -01 | 112(B) HAPS | 40 CFR Part 63, Subpart DDDDD | \$ 63.7500(a)(1)-Table 3.3 \$ 63.7490(a)(2) \$ 63.7490(b) \$ 63.7495(d) \$ 63.7495(d) \$ 63.7500(a) \$ 63.7500(a)(1) \$ 63.7500(b) \$ 63.7500(b) \$ 63.7500(f) \$ 63.7505(a) \$ 63.7505(a) \$ 63.7505(a) \$ 63.7505(a) \$ 63.7565 \$ 63.7565 | A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater must conduct a tune-up of the boiler or process heater annually as specified in § 63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions. | [G]§ 63.7540(a)(10) § 63.7540(a)(13) | [G]§ 63.7540(a)(10)(vi) [G]§ 63.7555(a) § 63.7555(i) § 63.7556(a) § 63.7560(a) § 63.7560(b) § 63.7560(c) | [G]§ 63.7540(a)(10)(vi) § 63.7545(a) § 63.7545(b) [G]§ 63.7545(f) [G]§ 63.7545(h) § 63.7550(a) § 63.7550(a)-Table 9.1.a § 63.7550(a)-Table 9.1.b § 63.7550(a)-Table 9.1.c [G]§ 63.7550(b) § 63.7550(c)(1) § 63.7550(c)(5) § 63.7550(c)(5)(ii) § 63.7550(c)(5)(iii) § 63.7550(c)(5)(iii) |

| | Permit Shield | |
|---------------|---------------|----|
| Permit Shield | ••••• | 20 |

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

| Unit/Gro | up/Process | Regulation | Basis of Determination |
|------------|------------------------------|----------------------------|--|
| ID No. | Group/Inclusive Units | | |
| F-20 | N/A | 40 CFR Part 63, Subpart Q | Cooling tower has not operated with chromium-based water treatment chemicals on or after 09/08/1994 |
| F-HYDROGEN | N/A | | There are no components that contain 5% organic HAPs, therefore none meet the definition of "in organic HAP service" pursuant to 40 CFR 63.641 |
| H-89 | N/A | 40 CFR Part 60, Subpart Db | The furnace meets the definition of "process heater" in NSPS Db, therefore it is not a steam generating unit |

| New Source Review Authorization References |
|--|
| New Source Review Authorization References 22 |
| New Source Review Authorization References by Emission Unit 23 |

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Prevention of Significant Deterioration (PSD) Permits | | | | | |
|--|---------------------------|--|--|--|--|
| PSD Permit No.: PSDTX861M2 Issuance Date: 10/23/2012 | | | | | |
| Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area. | | | | | |
| Authorization No.: 9708 | Issuance Date: 10/23/2012 | | | | |
| Authorization No.: 92928 | Issuance Date: 05/30/2012 | | | | |
| Authorization No.: HAP63 Issuance Date: 05/30/2012 | | | | | |
| Permits By Rule (30 TAC Chapter 106) for the Application Area | | | | | |
| Number: 106.371 Version No./Date: 09/04/2000 | | | | | |

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

| Unit/Group/Process ID No. | Emission Unit Name/Description | New Source Review Authorization |
|------------------------------|--------------------------------|---------------------------------|
| F-20 | NO. 1 REFINERY COOLING TOWER | 9708, 92928, PSDTX861M2 |
| F-HYDROGEN | HYDROGEN UNIT FUGITIVES | 92928 |
| H2-WW | HYDROGEN UNIT WASTEWATER | 92928 |
| H-89 | HYDROGEN UNIT REFORMER FURNACE | 92928, HAP63 |

| | Appendix A | |
|--------------|------------|--------------|
| Acronym List | | . 2 5 |

Acronym List

The following abbreviations or acronyms may be used in this permit:

| ACEM | actual cubic feet per minute |
|-----------------|---|
| | alternate means of control |
| | Acid Rain Program |
| ANT | Acid Kain FlogramAcid Kain FlogramAcid Kain Flogram |
| | |
| | Beaumont/Port Arthur (nonattainment area) |
| | |
| CD | control device |
| COMS | continuous opacity monitoring system |
| CVS | closed-vent system |
| D/FW | Dallas/Fort Worth (nonattainment area) |
| DR | Designated Representative |
| ElP | El Paso (nonattainment area) |
| EP | emission point |
| EPA | U.S. Environmental Protection Agency |
| EU | emission unit |
| FCAA Amendments | Federal Clean Air Act Amendments |
| FOP | federal operating permit |
| | grandfathered |
| gr/100 scf | grains per 100 standard cubic feet |
| | hazardous air pollutant |
| H/G/B | Houston/Galveston/Brazoria (nonattainment area) |
| | hydrogen sulfide |
| | identification number |
| | |
| MMBtu/hr | pound(s) per hour Million British thermal units per hour |
| MRRT | monitoring, recordkeeping, reporting, and testing |
| | nonattainment |
| | not applicable |
| | National Allowance Data Base |
| | nitrogen oxides |
| | New Source Performance Standard (40 CFR Part 60) |
| | |
| | Office of Regulatory Information Systems |
| Ph | lead |
| | Permit By Rule |
| | particulate matter |
| nnmy | parts per million by volume |
| PSD | parts per minor by volume per significant deterioration |
| | |
| | |
| | Texas Commission on Environmental Quality |
| <u> </u> | |
| | total suspended particulate |
| | true vapor pressure |
| | United States Code |
| VOC | volatile organic compound |